

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Sub
1. (currently) amended) A method for controlling a powertrain coupled to a vehicle, the powertrain having an internal combustion engine coupled to a transmission, the vehicle operated by a driver, the method comprising:

determining a desired vehicle trajectory in response to a release of an accelerator pedal by said driver, and during said release:-

adjusting an engine operating parameter to maintain positive powertrain output when based on a determination of whether an actual vehicle trajectory is below said desired vehicle trajectory; and

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adjusting said engine operating parameter to transition from positive powertrain output to negative powertrain output when based on a determination of whether said actual vehicle trajectory is above said desired vehicle trajectory.

2. (original) The method recited in Claim 1 further comprising limiting powertrain output rate of change during said transition.

3. (original) The method recited in Claim 1 wherein said step of adjusting said engine operating parameter to transition from positive powertrain output to negative powertrain output further comprises adjusting said engine operating parameter to transition from positive powertrain output to negative powertrain output when said actual vehicle trajectory is above said desired vehicle trajectory by a predetermined amount.

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4. (original) The method recited in Claim 1 wherein
said vehicle trajectory is a vehicle speed trajectory.

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5. (withdrawn)

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6. (original) The method recited in Claim 1, wherein
the engine is coupled to the transmission via a torque
converter, wherein said positive powertrain output is
maintained by maintaining torque converter input speed
greater than torque converter output speed.

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7. (original) The method recited in Claim 1 wherein
said desired vehicle trajectory is based on vehicle and
engine operating conditions.

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8. (original) The method recited in Claim 1 wherein
said desired vehicle trajectory is based on a position of a
transmission lever.

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9. (currently amended) The method recited Claim 8
wherein said level lever selects between at least the
following gears: reverse, neutral, a first forward, and a
second forward.

10. (currently canceled)

11. (original) The method recited in Claim 1, wherein
the engine is coupled to the transmission via a torque
converter, wherein said torque converter is unlocked while
maintaining positive powertrain output and then locked
after transitioning from positive to negative powertrain
output.

12. (currently amended) The method recited in claim 1
further comprising the step of controlling powertrain
output to a required negative powertrain output to maintain
said vehicle trajectory at or below said maximum allowed
desired vehicle trajectory.

13-17. (withdrawn)

18. (currently amended) A method for controlling a powertrain coupled to a vehicle, the powertrain having an internal combustion engine coupled to a transmission, the vehicle operated by a driver, the method comprising:

determining a desired vehicle speed trajectory in response to a release of an accelerator pedal by said driver, and during said release:

adjusting an engine torque to maintain positive powertrain output when an actual vehicle speed trajectory is below said desired vehicle speed trajectory; and

adjusting said engine torque to transition from positive powertrain output to negative powertrain output when said actual vehicle speed trajectory is above said desired vehicle speed trajectory.

19. (original) The method recited in Claim 18 wherein said desired vehicle speed trajectory is based on a vehicle operating parameter.